

WORKING DRAFT

General

Equipment Name

Karcher Portable Lightweight Decontamination System DS 10

ID# 48



Decontamination Process

Physical (removes contaminant) and Thermal (removes contaminant)

Applications

Personnel

No

Equipment

Yes

Infrastructure

No

Application Notes

The DS 10 is a portable lightweight decontamination system designed for the CB decontamination of personal equipment, and exterior equipment (i.e., vehicles, aircraft, protective suits). The system is in service in Austria, Belgium, Germany, Norway, Sweden, and some countries in the Middle East. This high-pressure system is equipped with a mixing device to generate different solutions or emulsions, thus allowing it to decontaminate a wide variety of items. The DS 10 consists of a 10 L pressure tank, a mixing device, and an air pump to pressurize the system. A pressure relief valve opens if the maximum operating pressure (6 bar) is exceeded.

Availability

Commercially available

Current User

In service in Austria, Belgium, Germany, Norway, and Sweden.

Manufacturer

KARCHER

Alfred Karcher Gmbh & Company

Alfred-Karcher-Strasse 28-40

Winnenden, Germany D-71364

+49-7195-142262 (Tel)

+49-7195-142780 (Fax)

email: hans-joachim.toepfer@de.kaercher.com

U.S. Agent: Life Safety Systems

343 Soquel Avenue, Suite 317

Santa Cruz, CA 95062

POC: Bill Conklin

831-728-9090 (Tel)

831-429-2224 (Tel)

info@lifesafetysys.com

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

WORKING DRAFT

Operational Parameters

CW Agents Decontaminated	Known theater agents
BW Agents Decontaminated	Known theater agents
High Hazard TIMs Decontaminated	Not specified
Medium Hazard TIMs Decontaminated	Not specified
Low Hazard TIMs Decontaminated	Not specified
Decontaminant Solutions	User selected
Capacity/Throughput	Decontaminates an area of 535 ft ²
Set-up Time	15 min

Physical Parameters

Size	Cylinder, 2.30 H and 0.68 (ft) in diameter
Weight	20.9 lb
Power Requirements	None

Logistical Parameters

Consumables Required	Decontaminant, water
Maintenance Repairs Required	Test semi-annually
Shelf Life	Not specified
Transportability	Man-Pack Portable Decontamination Unit
Durability	Built to military specifications
Environmental Conditions	The system has an operating temperature of 140 °F
Environmental Considerations	Not specified
Resources	Not specified
Unit Cost	\$1.9K
Maintenance Cost	Not specified
Warranty	Not specified

Special Requirements

Operator Skills Required	Minimal
Operator Training Required	Minimal
Training Available	Yes, on site
Manuals Available	Training manuals
Support Equipment	Decontaminant, water
Testing Information	Information not available
Applicable Regulations	Not specified

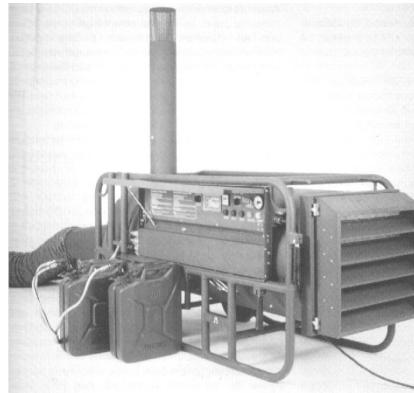
WORKING DRAFT

General

Equipment Name

ID# 49

Karcher Hot Air Generator FB 60 E



Decontamination Process

Physical (removes contaminant) and/or Chemical (neutralizes contaminant)

Applications

Personnel

No

Equipment

Yes

Infrastructure

No

Application Notes

The FB 60 E is a hot air generator used to decontaminate interior equipment, personal equipment, and exterior equipment. It is currently in service with the Australian, German, and U.S. armed forces. The FB 60 E coupled with an interior decontamination extension set with special filters is used to decontaminate interior equipment. The FB 60 E is comprised of a main fan and fuel pump, which are powered by a central 220 V electric motor. Incoming air, drawn through the radial fan, is heated using a burner and heat exchanger. The system requires diesel, diesel-petrol, or kerosene fuels to operate. The FB 60 E can be used for a variety of applications other than decontamination (i.e., ventilating NBC decontamination stations, heating or cooling cabins, cockpits, tents, or shelters).

Availability

Commercially available

Current User

In service with Australian, German, and U.S. Armed Forces

Manufacturer

KARCHER

Alfred Karcher GmbH & Company

Alfred-Karcher-Strasse 28-40

Winnenden, Germany D-71364

+49-7195-142262 (Tel)

+49-7195-142780 (Fax)

email: hans-joachim.toepfer@de.kaercher.com

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POC: Bill Conklin

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Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

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Operational Parameters

CW Agents Decontaminated	GB, VX, HD
BW Agents Decontaminated	All
High Hazard TIMs Decontaminated	Not specified
Medium Hazard TIMs Decontaminated	Not specified
Low Hazard TIMs Decontaminated	Not specified
Decontaminant Solutions	Water
Capacity/Throughput	Not specified
Set-up Time	Not specified

Physical Parameters

Size	5.64 L x 2.42 W x 1.01 H (ft)
Weight	441 lb
Power Requirements	Self powered via diesel fuel

Logistical Parameters

Consumables Required	Filters, fuel
Maintenance Repairs Required	Yes (monthly start-up)
Shelf Life	10 yr
Transportability	Not specified
Durability	Built to military specifications
Environmental Conditions	The FB 60 E is capable of working at temperatures as low as -22 °F
Environmental Considerations	Not specified
Resources	1 person to start and monitor
Unit Cost	\$17.5K
Maintenance Cost	Not specified
Warranty	Not specified

Special Requirements

Operator Skills Required	Not specified
Operator Training Required	2 h of training is required to operate this system
Training Available	Yes, on site
Manuals Available	User manual
Support Equipment	Light transport
Testing Information	Test data available upon request
Applicable Regulations	Not specified

WORKING DRAFT

General

Equipment Name

ID# 50

Karcher MPDS MultiPurpose Decontamination System



Decontamination Process

Physical (removes contaminant) and Thermal (removes contaminant)

Applications

Personnel

Yes

Equipment

Yes

Infrastructure

No

Application Notes

The MPDS is used to decontaminate skin and personal equipment, exterior equipment, and interior equipment. The system is currently in service with armed forces in Australia, Austria, Canada, Portugal, Sweden, United Kingdom, U.S., and NATO Headquarters. The MPDS is equipped with a high-pressure (60 bar) spray system and depending on the decontaminant used, the MPDS may employ either chemical or mechanical technologies. The MPDS is also equipped with a diesel engine, a burner, and a high-pressure water pump (maximum suction height of 5 m). Liquid decontaminants can be introduced into the water stream via the high-pressure pump at a rate up to 60 L/h. For easy usability, all MPDS operations can be controlled using an electrical control panel. The MPDS can also be used to provide water for showers in the field, steam explosives from munitions, or de-ice aircraft and missile systems. In addition, a sandblasting set is included to allow the removal of corrosion from equipment.

Availability

Commercially available

Current User

In service with Austria, Belgium, Germany, Norway, Sweden

Manufacturer

KARCHER

Alfred Karcher Gmbh & Company

Alfred-Karcher-Strasse 28-40

Winnenden, Germany D-71364

+49-7195-142262 (Tel)

+49-7195-142780 (Fax)

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831-429-2224 (Tel)

info@lifesafetysys.com

WORKING DRAFT

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

Known theater agents

BW Agents Decontaminated

Known theater agents

High Hazard TIMs

Not specified

Decontaminated

Medium Hazard TIMs

Not specified

Decontaminated

Low Hazard TIMs

Not specified

Decontaminated

Decontaminant Solutions

Not specified

Capacity/Throughput

Not specified

Set-up Time

Not specified

Physical Parameters

Size

4.10 L x 1.88 W x 2.78 H (ft)

Weight

484 lb

Power Requirements

4-stroke diesel engine that develops 5.6 hp at 3000 rpm

Logistical Parameters

Consumables Required

Decontaminant, Fuel

Maintenance Repairs Required

Monthly start-up and testing

Shelf Life

Not specified

Transportability

Light truck transport

Durability

Built to military specifications

Environmental Conditions

-22 °F to 140 °F (operating temperature)

Environmental Considerations

Not specified

Resources

Not specified

Unit Cost

Not specified

Maintenance Cost

Not specified

Warranty

Not specified

Special Requirements

Operator Skills Required

Not specified

Operator Training Required

Not specified

Training Available

Not specified

Manuals Available

Not specified

Support Equipment

Not specified

Testing Information

Information not available

Applicable Regulations

Not specified

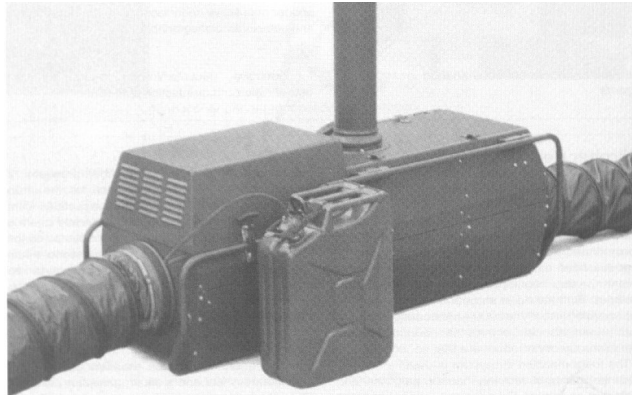
WORKING DRAFT

General

Equipment Name

ID# 51

Karcher Hot Air Generator FB 20



Decontamination Process

Physical (removes contaminant)

Applications

Personnel

Yes

Equipment

Yes

Infrastructure

No

Application Notes

The FB 20 is a hot air generator designed for the decontamination of clothing and other equipment placed inside a chamber or tent.

Availability

Commercially available

Current User

In service with Canada, Denmark, Germany, Norway, Sweden, USA, and other NATO Forces

Manufacturer

KARCHER

Alfred Karcher GmbH & Company

Alfred-Karcher-Strasse 28-40

Winnenden, Germany D-71364

+49-7195-142262 (Tel)

+49-7195-142780 (Fax)

email: hans-joachim.toepfer@de.kaercher.com

U.S. Agent: Life Safety Systems

343 Soquel Avenue, Suite 317

Santa Cruz, CA 95062

POC: Bill Conklin

831-728-9090 (Tel)

831-429-2224 (Tel)

info@lifesafetysys.com

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

Not specified

BW Agents Decontaminated

Not specified

High Hazard TIMs

Not specified

Decontaminated

Medium Hazard TIMs

Not specified

Decontaminated

WORKING DRAFT

Low Hazard TIMs Decontaminated	Not specified
Decontaminant Solutions	Not specified
Capacity/Throughput	Not specified
Set-up Time	Not specified

Physical Parameters

Size	4.44 L x 1.50 W x 1.98 H (ft)
Weight	171.6 lb
Power Requirements	230 V @ 50 Hz electrical power

Logistical Parameters

Consumables Required	Fuel
Maintenance Repairs Required	Not specified
Shelf Life	Not specified
Transportability	Not specified
Durability	Built to military specifications
Environmental Conditions	All environments
Environmental Considerations	All conditions
Resources	Not specified
Unit Cost	Not specified
Maintenance Cost	Not specified
Warranty	Not specified

Special Requirements

Operator Skills Required	Basic technical skills
Operator Training Required	8 h
Training Available	Yes
Manuals Available	Training manuals
Support Equipment	Light transport vehicle
Testing Information	Information not available
Applicable Regulations	Not specified

WORKING DRAFT

General

Equipment Name

ID# 52

Karcher AEDA1 Decontamination Equipment



Decontamination Process

Physical and Thermal (removes contaminant)

Applications

Personnel

Equipment

Infrastructure

No

Yes

No

Application Notes

The AEDA1, in service with German forces, is designed to decontaminate sensitive and interior equipment. The system employs a combination of low-temperature thermal technology and mechanical technology. The AEDA1 is comprised of four components: an aerosol spray dispenser, a hot air generator, a remote-control unit, and a surface cleaning system. Interior decontamination is conducted by spraying the contaminated surfaces with any decontaminant solution. The fine mist remains long enough in the air to decontaminate any contamination in the air. The decontaminant droplets also decontaminate material surfaces on contact. After the aerosol spray, the hot air generator is used to heat up the interior air and the interior equipment to neutralize any remaining agents. A remote-control unit can be used to operate the hot air generator as well as to control the temperature of the air. The surface cleaning system resembles a vacuum cleaner and is used to remove any decontamination solution residue. The cleaner dispenses a liquid disinfecting solution and then vacuums the residue into a waste tank. The surface cleaning system has an output rate of 1 L/min with a pressure of 1 bar.

Availability

Commercially available

Current User

In service with German Armed Forces and Crisis Reaction Forces

Manufacturer

KARCHER

Alfred Karcher Gmbh & Company

Alfred-Karcher-Strasse 28-40

Winnenden, Germany D-71364

+49-7195-142262 (Tel)

+49-7195-142780 (Fax)

email: hans-joachim.toepfer@de.kaercher.com

U.S. Agent: Life Safety Systems

343 Soquel Avenue, Suite 317

Santa Cruz, CA 95062

POC: Bill Conklin

831-728-9090 (Tel)

831-429-2224 (Tel)

info@lifesafetysys.com

WORKING DRAFT

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

Known theater agents

BW Agents Decontaminated

Known theater agents

High Hazard TIMs

Not specified

Decontaminated

Not specified

Medium Hazard TIMs

Decontaminated

Not specified

Low Hazard TIMs

Decontaminated

Decontaminant Solutions

User selected

Capacity/Throughput

Dispenses 1 L of decontaminant per minute

Set-up Time

15 min to 30 min

Physical Parameters

Size

27 x 19 x 25 (in)

Weight

69 lb

Power Requirements

110 V ac to 220 V ac

Logistical Parameters

Consumables Required

Decontaminant

Maintenance Repairs Required

Quarterly test

Shelf Life

Not specified

Transportability

Portable decontamination unit

Durability

Heavy duty construction

Environmental Conditions

Works in all climates

Environmental Considerations

Not specified

Resources

Not specified

Unit Cost

Not specified

Maintenance Cost

Not specified

Warranty

Not specified

Special Requirements

Operator Skills Required

Basic skills

Operator Training Required

8 h

Training Available

Yes, on site

Manuals Available

Training manual

Support Equipment

Not specified

Testing Information

Information not available

Applicable Regulations

Not specified

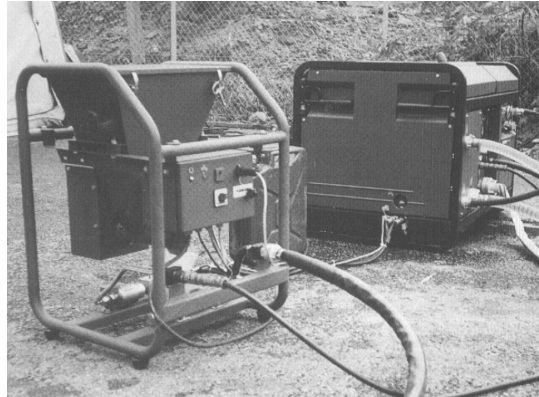
WORKING DRAFT

General

Equipment Name

ID# 53

Karcher M600 Decontaminant Mixer



Decontamination Process

Mixes Decontaminant Agents

Applications

Personnel

No

Equipment

Yes

Infrastructure

No

Application Notes

The M600 Decontaminant Mixer, in service with NATO forces, is designed to add and mix decontaminants using water jets for use with high-pressure cleaning systems. Depending on the decontaminant used, the M600 may employ either chemical or mechanical technologies. The M600 is equipped with a mixer, a 25 m hose, and a spray lance. The system is linked to a high-pressure system with a pressure hose and an electrical cable.

Availability

Commercially available

Current User

In service with NATO countries

Manufacturer

KARCHER

Alfred Karcher Gmbh & Company

Alfred-Karcher-Strasse 28-40

Winnenden, Germany D-71364

+49-7195-42262 (Tel)

+49-7195-142780 (Fax)

email: hans-joachim.toepfer@de.kaercher.com

U.S. Agent: Life Safety Systems

343 Soquel Avenue, Suite 317

Santa Cruz, CA 95062

POC: Bill Conklin

831-728-9090 (Tel)

831-429-2224 (Tel)

info@lifesafetyssys.com

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

Not specified

BW Agents Decontaminated

Not specified

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High Hazard TIMs Decontaminated	Not specified
Medium Hazard TIMs Decontaminated	Not specified
Low Hazard TIMs Decontaminated	Not specified
Decontaminant Solutions	Not specified
Capacity/Throughput	Not specified
Set-up Time	Not specified

Physical Parameters

Size	1.83 L x 1.96 W x 2.75 H (ft)
Weight	88 lb
Power Requirements	12 V or 24 V supply

Logistical Parameters

Consumables Required	Decontaminant
Maintenance Repairs Required	Monthly test
Shelf Life	Not specified
Transportability	Light truck transport
Durability	Built to military specifications
Environmental Conditions	Operates in all climates
Environmental Considerations	Not specified
Resources	Not specified
Unit Cost	Not specified
Maintenance Cost	Not specified
Warranty	Not specified

Special Requirements

Operator Skills Required	Basic skills
Operator Training Required	8 h
Training Available	Yes
Manuals Available	Training manuals
Support Equipment	Truck transport
Testing Information	Information not available
Applicable Regulations	Not specified

WORKING DRAFT

General

Equipment Name

Atmospheric Pressure Plasma Jet

ID# 54

Picture Not Available

Decontamination Process

Physical (removes contaminant)

Applications

Personnel

Equipment

Infrastructure

No

Yes

No

Application Notes

The Atmospheric Pressure Plasma Jet (APPJ) is a developmental item designed to decontaminate sensitive and interior equipment. The APPJ is under development by the Los Alamos National Laboratory in New Mexico, USA. The system employs oxidation technology.

Availability

Commercially available

Current User

Not specified

Manufacturer

Los Alamos National Laboratory
P-24 Plasma Physics, M/S E526
Los Alamos, NM 87545
505-665-6157 (Tel)
505-665-3552 (Fax)
email: herrmann@lanl.gov

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

None

BW Agents Decontaminated

None

**High Hazard TIMs
Decontaminated**

None

**Medium Hazard TIMs
Decontaminated**

None

**Low Hazard TIMs
Decontaminated**

None

Decontaminant Solutions

None

Capacity/Throughput

Not specified

Set-up Time

Not specified

Physical Parameters

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Size	Not specified
Weight	Not specified
Power Requirements	Not specified

Logistical Parameters

Consumables Required	Not specified
Maintenance Repairs Required	Not specified
Shelf Life	Not specified
Transportability	Not specified
Durability	Not specified
Environmental Conditions	Not specified
Environmental Considerations	Not specified
Resources	Not specified
Unit Cost	Not specified
Maintenance Cost	Not specified
Warranty	Not specified

Special Requirements

Operator Skills Required	Not specified
Operator Training Required	Not specified
Training Available	Not specified
Manuals Available	Not specified
Support Equipment	Not specified
Testing Information	Information not available
Applicable Regulations	Not specified

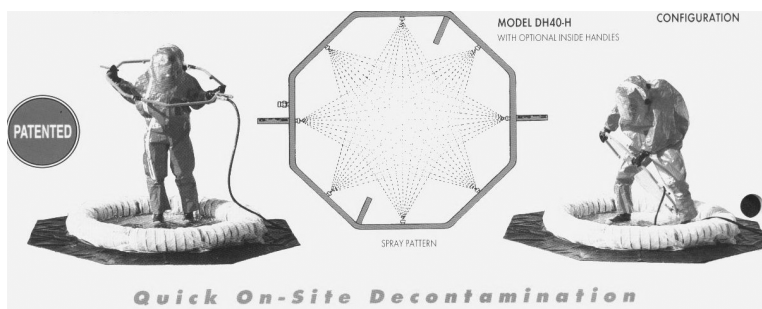
WORKING DRAFT

General

Equipment Name

ID# 55

Decon Hoop



Decontamination Process

Physical (removes contaminant)

Applications

Personnel

Yes

Equipment

Yes

Infrastructure

No

Application Notes

The Decon Hoop is a portable spray hoop used to decontaminate skin and personal equipment as well as exterior equipment. The Decon Hoop is commercially available in the U.S. and is manufactured by MITI Manufacturing. The apparatus employs mechanical technology.

Availability

Commercially available

Current User

U.S. Army, U.S. Navy, U.S. Air Force, various municipal fire departments, and several industrial companies in the hazardous chemical industry.

Manufacturer

MITI Manufacturing, Inc.
2996 Teller Court
Grand Junction, CO 81504
970-243-9500 (Tel)
970-243-9200 (Fax)

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

GB, VX, HD

BW Agents Decontaminated

All

High Hazard TIMs
Decontaminated

Not specified

Medium Hazard TIMs
Decontaminated

Not specified

Low Hazard TIMs
Decontaminated

Not specified

Decontaminant Solutions

Water

Capacity/Throughput

Dispenses 4.6 gal/min to 5.1 gal/min

Set-up Time

2 min

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Physical Parameters

Size	3.75 o.d. x 3.25 i.d. (ft)
Weight	10 lb
Power Requirements	None

Logistical Parameters

Consumables Required	Decontaminant
Maintenance Repairs Required	Not specified
Shelf Life	Not specified
Transportability	Portable decontamination unit
Durability	Constructed from durable heliarc-welded lightweight, corrosion free aluminum pipe and tubes.
Environmental Conditions	Information not available
Environmental Considerations	Not specified
Resources	Not specified
Unit Cost	\$585 to \$775 (based upon quantity and configuration)
Maintenance Cost	Not specified
Warranty	1 yr

Special Requirements

Operator Skills Required	Minimal
Operator Training Required	None
Training Available	Not specified
Manuals Available	Not specified
Support Equipment	Decon waste collection pool, portable foot pump, soap injector, water distribution manifolds
Testing Information	Information not available
Applicable Regulations	Not specified

WORKING DRAFT

General

Equipment Name

ID# 56

SNL Decon Formulation



Decontamination Process

Chemical (neutralizes contaminant)

Applications

Personnel

Yes

Equipment

Yes

Infrastructure

Yes

Application Notes

A nontoxic, noncorrosive, aqueous formulation for the rapid mitigation and decontamination of CBW agents. SNL Decon Formulation can be deployed as a foam, liquid spray, or fog. Potentially, the formulation can be used by first responders of an attack and by personnel assigned to restoration of an affected facility after an attack. The formulation works quickly, does not generate toxic by-products. It can be deployed by small handheld devices, similar to fire extinguishers, and in large-scale foam-generating devices. The formulation as liquid spray can be disseminated by means of commercially available paint sprayers. Commercially available cold foggers work well when deploying the formulation as fog.

Availability

Available

Current User

National guards, over 120 Federal, State, and local agencies

Manufacturer

Modec, Inc.
4725 Oakland St.
Denver, CO 80239
800-967-7887 (Tel)
303-373-2699 (Fax)

Developed by Sandia National Laboratories
POC: Brian Kalamanka
www.massdecon.com

Source

Modec, Inc.
www.deconsolutions.com

Operational Parameters

CW Agents Decontaminated

G agents, VX, Mustard

BW Agents Decontaminated

Bacillus globigii (a simulant of anthrax spores), Erwinia herbicola (a simulant for vegetative bacterial cells), MS-2 bacteriophage (a simulant for viruses)

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High Hazard TIMs Decontaminated	Not specified
Medium Hazard TIMs Decontaminated	Not specified
Low Hazard TIMs Decontaminated	Not specified
Decontaminant Solutions	Nontoxic, noncorrosive, environmental friendly
Capacity/Throughput	50:1 expansion rate
Set-up Time	Immediate

Physical Parameters

Size	Several sizes available of output hose: 1 in, 1-1/2 in, 2 in, or 3 in line
Weight	Varies according to model
Power Requirements	Dependant on equipment, can be delivered manually

Logistical Parameters

Consumables Required	None
Maintenance Repairs Required	Routine
Shelf Life	Indefinite
Transportability	Depends on application
Durability	Ruggedized commercial equipment
Environmental Conditions	Can be operated on all terrains and in remote locations
Environmental Considerations	None
Resources	One person
Unit Cost	Depends on size and application
Maintenance Cost	Minimal
Warranty	Depends on equipment

Special Requirements

Operator Skills Required	Minimal
Operator Training Required	Minimal
Training Available	Yes
Manuals Available	Yes
Support Equipment	Typical hose line
Testing Information	Available, under www.deconsolutions.com \SNLformulation
Applicable Regulations	Not specified

WORKING DRAFT

General

Equipment Name

ID# 57

Reactive Skin Decontaminant Lotion



Decontamination Process

Chemical (neutralizes contaminant)

Applications

Personnel

Equipment

Infrastructure

Yes

Yes

No

Application Notes

The Reactive Skin Decontamination Lotion (RSDL) is designed to neutralize CWAs on skin and personal equipment. The lotion is manufactured in Canada by O'Dell Engineering Ltd., and is in service with the Canadian Armed Forces. The lotion employs chemical technology and is effective on vesicants (H and L) and nerve agents (G and V). The lotion is supplied in easy to use individual pouches with a foam applicator for personal decontamination and equipment decontamination. The lotion can also be distributed in large containers in order to treat mass casualties. The lotion is nontoxic and has been proven to be safe to use on the eyes. Any left over residue can be washed away with water.

Availability

Commercially available

Current User

Canadian Dept. of National Defense, Netherlands, Australia, OPCW

Manufacturer

O'Dell Engineering Ltd.
28 Hilborn Avenue
Cambridge, Ontario, Canada N1T 1M7
519-740-8620 (Tel)
519-740-9483 (Fax)
email: rsdl@odell.on.ca

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)
Irvin Aerospace Canada Ltd.

Operational Parameters

CW Agents Decontaminated

All known military chemical agents

BW Agents Decontaminated

Effective against some military biological agents. Contact manufacturer for details

**High Hazard TIMs
Decontaminated**

Under study

WORKING DRAFT

Medium Hazard TIMs Decontaminated	Under study
Low Hazard TIMs Decontaminated	Under study
Decontaminant Solutions	RSDL; bio-degradable/nonflammable
Capacity/Throughput	Individual decontamination; each person carries own bottle/pouch
Set-up Time	None
<u>Physical Parameters</u>	
Size	500 mL bottle or individual pouches (6 in x 6 in x .5 in)
Weight	1.2 lb (pouch is 2 oz)
Power Requirements	None
<u>Logistical Parameters</u>	
Consumables Required	None
Maintenance Repairs Required	None
Shelf Life	Call for information
Transportability	Fully portable. Can be carried in pocket or pouch
Durability	Provided in a protective pouch
Environmental Conditions	Operates in common civilian and military environments
Environmental Considerations	Waste disposal
Resources	One person (individual)
Unit Cost	Call for information (volume dependant)
Maintenance Cost	None
Warranty	Not applicable
<u>Special Requirements</u>	
Operator Skills Required	Minimal to none
Operator Training Required	Minimal to none
Training Available	1 h
Manuals Available	User manuals, training guidelines, and training simulant
Support Equipment	None
Testing Information	Testing on the RSDL has been done by the Canadian Defense Research Establishment Suffield (DRES) (Government Agency). The following test report is available upon request: Repeated Dermal Toxicity Trial of the Canadian Reactive Skin Decontaminant Lotion (RSDL) (DRES)
Applicable Regulations	Not FDA approved

WORKING DRAFT

General

Equipment Name

Plychem DECAS W Casualty Decontamination Unit

ID# 58



Decontamination Process

Physical (removes contaminant)

Applications

Personnel

Equipment

Infrastructure

Yes

No

No

Application Notes

The DECAS W is a portable inflatable casualty decontamination shower manufactured in the United Kingdom by Plysu PLC. It is designed for skin and personnel decontamination. It is equipped with a step-down water pressure reducer to moderate water supply pressures and a choice of valve-operated, hand-held showerheads is available. The unit is large enough to accommodate a casualty on a wheeled stretcher with Paramedics attending inside, or several walking wounded. Strategically placed clear windows are included for official observation, and a disposable inner lining can be incorporated. A remote water-heating unit is also available.

Availability

Ex stock to maximum few weeks

Current User

Fire and ambulance services, hospitals

Manufacturer

Plysu PLC
United Kingdom
U.S. Agent: FSI North America
Division of Fire Safety, International, Inc.
POC: Mark Conron
440-891-1523 (Tel)
440-891-1562 (Fax)
www.fsinorth.com

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

Not specified

BW Agents Decontaminated

Not specified

**High Hazard TIMs
Decontaminated**

Wide range

**Medium Hazard TIMs
Decontaminated**

Wide range

WORKING DRAFT

Low Hazard TIMs
Decontaminated
Decontaminant Solutions
Capacity/Throughput
Set-up Time

Wide range
Water and detergent
Less than 50 personnel
Between 30 min to 60 min
2 min to 3 min to install ready for operation

Physical Parameters

Size
Weight
Power Requirements

9.35 L x 6.1/4.9 W x 6.7 H (ft)
Packed - approximately 3.3 x 2.5 x 1.6 (ft)
Approximately 88 lb
Decon unit – none
Optional water heating unit - 222 V to 240 V, 5 kW, 32 A

Logistical Parameters

Consumables Required
Maintenance Repairs Required
Shelf Life
Transportability
Durability
Environmental Conditions
Environmental Considerations
Resources
Unit Cost
Maintenance Cost
Warranty

Compressed air for inflation. Optional disposable inner lining.
Clean, dry, and check over after use.
5 yr
Highly transportable - low weight and small footprint
Constructed from durable polymer material
Operates in most environments
Safe disposal of collected waste
1 to 2 people are required to fully operate the decontamination system
\$5.5K to \$11.5K depending on specification and optional equipment (e.g., water heating unit)
Very minimal
1 yr

Special Requirements

Operator Skills Required
Operator Training Required
Training Available
Manuals Available
Support Equipment
Testing Information
Applicable Regulations

No special skills, but training recommended
1 h to 3 h
Yes
User manuals and training media
Optional water heating and generator for remote use
Information not available
Not specified

WORKING DRAFT

General

Equipment Name

PLYCHEM DPI Decontamination Unit

ID# 59



Decontamination Process

Physical (removes contaminant)

Applications

Personnel

Equipment

Infrastructure

Yes

No

No

Application Notes

The PLYCHEM DPI is a portable inflatable decontamination shower manufactured in the United Kingdom by Plysu PLC. It is designed for skin and personnel decontamination. The DPI is constructed from durable polymer material with entry and exit ports. At a rate of 40 L/min, a mist spray of water or water plus decontaminant solution is used in conjunction with an integral brush. External personnel can assist decontamination through optional glove sleeves. Clear windows are included for official observation and a disposable inner lining can be incorporated.

Availability

Ex stock to maximum few weeks

Current User

Fire services and high risk industries

Manufacturer

Plysu PLC
United Kingdom
U.S. Agent: FSI North American
Division of Fire Safety International, Inc.
Berea, OH 44017
POC: Mark Conron
440-891-1523 (Tel)
440-891-1562 (Fax)
www.fsinorth.com

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

Not specified

BW Agents Decontaminated

Not specified

High Hazard TIMs

Wide range

Decontaminated

Medium Hazard TIMs

Wide range

Decontaminated

WORKING DRAFT

Low Hazard TIMs	Wide range
Decontaminated	
Decontaminant Solutions	Water and detergent
Capacity/Throughput	Less than 50 personnel
Set-up Time	Between 30 min to 60 min 2 min to 3 min to install ready for operation

Physical Parameters

Size	6.14/4.89 x 6.14/4.89 W x 7.74 H (ft) Packed – approximately 3.3 x 2.5 x 1.6 (ft)
Weight	Approximately 88 lb
Power Requirements	None

Logistical Parameters

Consumables Required	Compressed air for inflation. Optional disposable inner lining.
Maintenance Repairs Required	Clean, dry, and check over after use.
Shelf Life	5 yr
Transportability	Highly transportable - low weight and small footprint
Durability	Constructed from durable polymer material
Environmental Conditions	Operates in most environments
Environmental Considerations	Safe disposal of collected waste
Resources	1 to 2 people are required to fully operate the decontamination system
Unit Cost	\$3.5K to \$5.5K depending on specification and optional equipment
Maintenance Cost	Very minimal
Warranty	1 yr

Special Requirements

Operator Skills Required	No special skills, but training recommended
Operator Training Required	1 h to 3 h
Training Available	Yes
Manuals Available	User manuals and training media
Support Equipment	Not specified
Testing Information	Information not available
Applicable Regulations	Not specified

WORKING DRAFT

General

Equipment Name

Modular Mass Casualty Decontamination System

ID# 60



Decontamination Process

Physical (removes contaminant) and Chemical (neutralizes contaminant)

Applications

Personnel

Equipment

Infrastructure

Yes

No

No

Application Notes

Not specified

Availability

Commercially available

Current User

Not specified

Manufacturer

Reeves Manufacturing, Inc.
30 East 9th Street
Frederick, MD 21701
800-328-5563 (Tel)
301-698-1596 (Tel)
301-698-1599 (Fax)
<http://www.reevesmfg.com>

Source

Operational Parameters

CW Agents Decontaminated

Not specified

BW Agents Decontaminated

Not specified

High Hazard TIMs

Not specified

Decontaminated

Medium Hazard TIMs

Not specified

Decontaminated

Low Hazard TIMs

Not specified

Decontaminated

Decontaminant Solutions

Hypochlorite decontamination solutions

Capacity/Throughput

Dispenses 0.02 lb/h to 1.2 lb/h of decontaminant;
decontaminates 6 personnel

Set-up Time

Less than 10 min

Physical Parameters

Size

Not specified

Weight

Not specified

Power Requirements

Not specified

WORKING DRAFT

Logistical Parameters

Consumables Required	Not specified
Maintenance Repairs Required	Not specified
Shelf Life	Not specified
Transportability	Portable Decontamination Unit
Durability	Not specified
Environmental Conditions	Ideal for all environments
Environmental Considerations	Not specified
Resources	2 to 3 personnel
Unit Cost	Not specified
Maintenance Cost	Not specified
Warranty	Not specified

Special Requirements

Operator Skills Required	Not specified
Operator Training Required	Not specified
Training Available	Not specified
Manuals Available	Not specified
Support Equipment	Not specified
Testing Information	Information not available
Applicable Regulations	Not specified

WORKING DRAFT

General

Equipment Name

ID# 61

Decontamination Kit, Personal No 1 Mark 1



Decontamination Process

Physical (removes contaminant)

Applications

Personnel

Yes

Equipment

No

Infrastructure

No

Application Notes

The Personal No. 1, Mark 1 is a Decontamination Kit used by field personnel in the event of a chemical warfare attack. The kit is manufactured in the U.K. by Remploy Ltd., and is in service with the U.K. Armed Forces. The kit employs sorbent technology and is comprised of a sealed plastic bag that contains four pads filled with Fuller's Earth.

Availability

Commercially available

Current User

In service with the U.K. Armed Forces

Manufacturer

Remploy Ltd.
415 Edgware Rd.
Cricklewood, London NW2 6LR
Country: United Kingdom
+44-1812-350500 (Tel)
+44-1812-350501 (Fax)

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

G, VX, HD

BW Agents Decontaminated

Not specified

High Hazard TIMs

Not specified

Decontaminated

Medium Hazard TIMs

Not specified

Decontaminated

Low Hazard TIMs

Not specified

Decontaminated

Decontaminant Solutions

Fuller's Earth

WORKING DRAFT

Capacity/Throughput	Not specified
Set-up Time	Not specified

Physical Parameters

Size	Not specified
Weight	Not specified
Power Requirements	None

Logistical Parameters

Consumables Required	Decontaminant
Maintenance Repairs Required	Not specified
Shelf Life	Not specified
Transportability	Man-Portable Decontamination Unit
Durability	Not specified
Environmental Conditions	Not specified
Environmental Considerations	Not specified
Resources	One person
Unit Cost	Not specified
Maintenance Cost	Not specified
Warranty	Not specified

Special Requirements

Operator Skills Required	Minimal
Operator Training Required	Minimal
Training Available	Not specified
Manuals Available	Not specified
Support Equipment	None
Testing Information	Information not available
Applicable Regulations	Not specified

WORKING DRAFT

General

Equipment Name

ID# 62

Decontamination Kit, Personal No. 2, Mark 1



Decontamination Process

Physical (removes contaminant)

Applications

Personnel

Equipment

Infrastructure

Yes

No

No

Application Notes

The Personal No. 2, Mark 1 is a Decontamination Kit used by U.K. field personnel. The Personal No. 2, Mark 1 is used to decontaminate personal equipment and employs sorbent technology. The kit is comprised of a flat polythene dispenser containing 113 g of Fuller's Earth. The kit is generally used with the Personal No. 1, Mark 1 Decontamination Kit.

Availability

Commercially available

Current User

In service with the U.K. Armed Forces

Manufacturer

Richmond Packaging (U.K.) Ltd.
New Road
Winsford, Cheshire CW7 2 NY
Country: United Kingdom
+44-1606-557422 (Tel)
+44-1606-861063 (Fax)

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

GB, VX, HD

BW Agents Decontaminated

Not specified

High Hazard TIMs

Not specified

Decontaminated

Medium Hazard TIMs

Not specified

Decontaminated

Low Hazard TIMs

Not specified

Decontaminated

Decontaminant Solutions

Decontaminating powder

Capacity/Throughput

Not specified

WORKING DRAFT

Set-up Time Not specified

Physical Parameters

Size 0.55 x 0.28 x 0.20 (in)

Weight 4.58 oz

Power Requirements None

Logistical Parameters

Consumables Required Decontaminant

Maintenance Repairs Required None

Shelf Life Not specified

Transportability Man-Portable Decontamination Unit

Durability Not specified

Environmental Conditions Not specified

Environmental Considerations Not specified

Resources Not specified

Unit Cost Not specified

Maintenance Cost Not specified

Warranty Not specified

Special Requirements

Operator Skills Required Minimal

Operator Training Required Minimal to none

Training Available Not specified

Manuals Available Not specified

Support Equipment Personal No. 1, Mark 1 Decontamination Kit

Testing Information Information not available

Applicable Regulations Not specified

WORKING DRAFT

General

Equipment Name

ID# 63

Hazmat Decon Shower



Decontamination Process

Physical (removes contaminant) and Chemical (neutralizes contaminant)

Applications

Personnel

Yes

Equipment

No

Infrastructure

No

Application Notes

The Hazmat Decon Shower, manufactured by RMC Medical, is designed to decontaminate personnel. The Hazmat Decon Shower is made of 1 ½ in PVC tubing and is transportable in a canvas duffel bag.

Availability

Commercially available

Current User

Not specified

Manufacturer

RMC Medical, Inc.
3019 Darnell Rd.
Philadelphia, PA 19154
215-824-4100 (Tel)
215-824-1371 (Fax)

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

GB, VX, HD

BW Agents Decontaminated

All

**High Hazard TIMs
Decontaminated**

Not specified

**Medium Hazard TIMs
Decontaminated**

Not specified

**Low Hazard TIMs
Decontaminated**

Not specified

Decontaminant Solutions

DS2

Capacity/Throughput

Dispenses 0.0066 lb to 0.0088 lb of water per minute @ 40 psi to 60 psi

Set-up Time

Several min

WORKING DRAFT

Physical Parameters

Size	3.58 L x 3.58 W x 7.66 H (ft)
Weight	58 lb
Power Requirements	None

Logistical Parameters

Consumables Required	Decontaminant
Maintenance Repairs Required	Not specified
Shelf Life	Indefinite
Transportability	Portable Decontamination Unit
Durability	Constructed of 1 1/2 in PVC tubing
Environmental Conditions	Extreme heat of sun may cause shower to flake and bend. Extreme cold may cause brittleness.
Environmental Considerations	Not specified
Resources	One person to assemble and operate.
Unit Cost	\$475
Maintenance Cost	Not specified
Warranty	Manufacturer defects only

Special Requirements

Operator Skills Required	Able to read and follow directions for setup
Operator Training Required	None
Training Available	None
Manuals Available	None
Support Equipment	Water supply and standard garden hose
Testing Information	Information not available
Applicable Regulations	Not specified

WORKING DRAFT

General

Equipment Name

Hazmat Decon Backboard

ID# 64

Picture Not Available

Decontamination Process

Physical (removes contaminant) and Chemical (neutralizes contaminant)

Applications

Personnel

Equipment

Infrastructure

Yes

No

No

Application Notes

The Hazmat Decon Backboard is a multipurpose backboard specially designed for spinal immobilization, patient decontamination and water, confined space, and high angle rescue.

Availability

Commercially available

Current User

Not specified

Manufacturer

RMC Medical, Inc.
3019 Darnell Rd.
Philadelphia, PA 19154
215-824-4100 (Tel)
215-824-1371 (Fax)

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

GB, VX, HD

BW Agents Decontaminated

All

High Hazard TIMs

Not specified

Decontaminated

Medium Hazard TIMs

Not specified

Decontaminated

Low Hazard TIMs

Not specified

Decontaminated

Decontaminant Solutions

DS2

Capacity/Throughput

Not specified

Set-up Time

Not specified

Physical Parameters

Size

6 L x 1.33 W x 0.18 H (ft)

Weight

14 lb

WORKING DRAFT

Power Requirements

None

Logistical Parameters

Consumables Required

None

Maintenance Repairs Required

Not specified

Shelf Life

Not specified

Transportability

Portable Decontamination Unit

Durability

Not specified

Environmental Conditions

Not specified

Environmental Considerations

Not specified

Resources

Not specified

Unit Cost

Not specified

Maintenance Cost

Not specified

Warranty

Not specified

Special Requirements

Operator Skills Required

Minimal

Operator Training Required

Minimal

Training Available

Not specified

Manuals Available

Not specified

Support Equipment

None

Testing Information

Information not available

Applicable Regulations

Not specified

WORKING DRAFT

General

Equipment Name

Decontamination Apparatus, Portable, DS2, ABC-M11

ID# 65



Decontamination Process

Physical (removes contaminant)

Applications

Personnel

Equipment

Infrastructure

No

Yes

No

Application Notes

The ABC-M11 is a portable decontaminating apparatus used to decontaminate exterior equipment (i.e., military vehicles, crew-served weapons). The system is currently in service with the U.S. Army and Israeli Armed Forces. The equipment has a filled nitrogen pressure cartridge. However, before use, the container must be filled with DS2 decontaminating agent. The M11 functions by removal of the seal-retaining pin. After removing the pin, the handle is lifted to puncture the pressure can, dispersing the DS2. The ABC-M11 has an optimum range of about 2 m and can cover approximately 42 m². There are three models currently available, the M11, the M11 Stretch, and the M11 Super Stretch. The three models differ only by container volume, the M11 has a filled volume of 1.26 L, the M11 Stretch has a filled volume of 1.5 L and the M11 Super Stretch has a filled volume of 2.66 L. This system is also available with the M11 A/G dry sorbent dispenser. The M11 A/G sprays the AMBERGARDTM XE-555 powder.

Availability

Commercially available

Current User

In service with the U.S. Army and Israel Armed Forces

Manufacturer

Slate Enterprises, Inc.
2923 Saturn Street
Unit C
Brea, CA 92821
714-985-0117 (Tel)
714-985-9956 (Fax)

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

None

BW Agents Decontaminated

None

WORKING DRAFT

High Hazard TIMs Decontaminated	Not specified
Medium Hazard TIMs Decontaminated	Not specified
Low Hazard TIMs Decontaminated	Not specified
Decontaminant Solutions	Not specified
Capacity/Throughput	Decontaminates 449 ft ²
Set-up Time	Not specified

Physical Parameters

Size	5.4 D x 22.4 H (in)
Weight	7.52 lb
Power Requirements	Not specified

Logistical Parameters

Consumables Required	Decontaminant
Maintenance Repairs Required	Not specified
Shelf Life	Not specified
Transportability	Portable Decontamination Unit
Durability	Not specified
Environmental Conditions	-25.06 °F to 120.2 °F (operating temperature)
Environmental Considerations	Not specified
Resources	Not specified
Unit Cost	Not specified
Maintenance Cost	Not specified
Warranty	Not specified

Special Requirements

Operator Skills Required	Minimal
Operator Training Required	Minimal
Training Available	Not specified
Manuals Available	Not specified
Support Equipment	None
Testing Information	Information not available
Applicable Regulations	Not specified

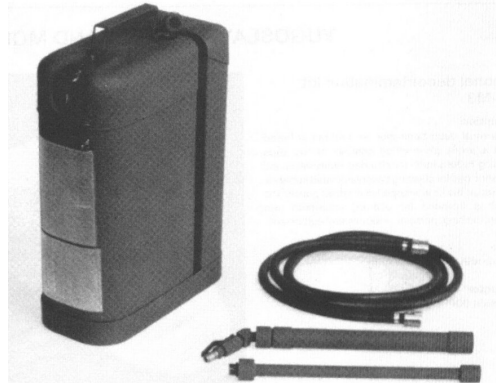
WORKING DRAFT

General

Equipment Name

M13 Portable Decontaminating Apparatus (DAP)

ID# 66



Decontamination Process

Physical (removes contaminant), chemical (neutralizes contaminant), or Thermal (removes contaminant)

Applications

Personnel

Equipment

Infrastructure

No

Yes

No

Application Notes

The M13 Portable DAP is a portable system used to decontaminate exterior equipment (i.e., wheeled and track vehicles, crew-served weapons larger than 60 caliber (0.60 in/15 mm), towed artillery). The M13 is manufactured by All-Bann Enterprises, Inc., and is currently in service with the U.S. Army. This equipment employs chemical technology and can be either vehicle-mounted or man-portable. The M13 is comprised of a disposable container filled with 14 L of DS2 decontaminating agent (or can be replaced with any other decontaminating agent), an accessory container holder, a manual in-line pump, one to two wand sections, and a disposable synthetic filament polypropylene brush. The accessory container provides storage for all M13 components. The specifications associated with the M13 DAP include a volume of 14 L, a filled weight of 24.5 kg, and an empty weight of 10.9 kg.

Availability

Commercially available

Current User

In service with the U.S. Army

Manufacturer

Slate Enterprises, Inc.
2923 Saturn Street
Unit C
Brea, CA 92821
714-985-0117 (Tel)
714-985-9956 (Fax)

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

G agents, VX, HD

BW Agents Decontaminated

All

High Hazard TIMs

Not specified

Decontaminated

WORKING DRAFT

Medium Hazard TIMs Decontaminated	Not specified
Low Hazard TIMs Decontaminated	Not specified
Decontaminant Solutions	Not specified
Capacity/Throughput	Approximately 1198 ft ²
Set-up Time	Not specified

Physical Parameters

Size	14 L x 6.6 W x 18.7 H (in)
Weight	24 lb
Power Requirements	None

Logistical Parameters

Consumables Required	Decontaminant
Maintenance Repairs Required	Not specified
Shelf Life	Not specified
Transportability	Portable Decontamination Unit
Durability	Not specified
Environmental Conditions	-25.06 °F to 120.2 °F
Environmental Considerations	Not specified
Resources	Not specified
Unit Cost	Not specified
Maintenance Cost	Not specified
Warranty	Not specified

Special Requirements

Operator Skills Required	Minimal
Operator Training Required	Minimal
Training Available	Not specified
Manuals Available	Not specified
Support Equipment	None
Testing Information	Information not available
Applicable Regulations	Not specified

WORKING DRAFT

General

Equipment Name

NBC6F Water Purification Unit (WPU)

ID# 67



Decontamination Process

Chemical (neutralizes contaminant)

Applications

Personnel

Equipment

Infrastructure

No

Yes

Yes

Application Notes

The NBC6F is a decontamination unit used to purify contaminated drinking water. The NBC6F is capable of treating 2.2 m³/h of NBC contaminated water.

Availability

Commercially available

Current User

Not specified

Manufacturer

Stella-Meta
Laversoke Mill
Whitchurch, Hampshire, United Kingdom RG287NR
+44-1256-895959 (Tel)
+44-1256-892074 (Fax)
email: pcims@compuserve.com

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

Not specified

BW Agents Decontaminated

Not specified

**High Hazard TIMs
Decontaminated**

Not specified

**Medium Hazard TIMs
Decontaminated**

Not specified

**Low Hazard TIMs
Decontaminated**

Not specified

Decontaminant Solutions

Not specified

Capacity/Throughput

Decontaminates 24 ft² of contaminated water per hour

Set-up Time

Not specified

WORKING DRAFT

Physical Parameters

Size	13.12 L x 8.20 W x 7.87 H (ft)
Weight	7260 lb
Power Requirements	Not specified

Logistical Parameters

Consumables Required	Not specified
Maintenance Repairs Required	Not specified
Shelf Life	Not specified
Transportability	Mobile Decontamination Unit
Durability	Not specified
Environmental Conditions	Not specified
Environmental Considerations	Not specified
Resources	Not specified
Unit Cost	Not specified
Maintenance Cost	Not specified
Warranty	Not specified

Special Requirements

Operator Skills Required	Not specified
Operator Training Required	Not specified
Training Available	Not specified
Manuals Available	Not specified
Support Equipment	Not specified
Testing Information	Information not available
Applicable Regulations	Not specified

WORKING DRAFT

General

Equipment Name

ID# 68

Decontamination Kit No. 2



Decontamination Process

Physical (removes contaminant)

Applications

Personnel

Equipment

Infrastructure

Yes

No

No

Application Notes

The Decontamination Kit No. 2 is used to decontaminate personal equipment and can be used in conjunction with the M281 Skin Decontamination Kit for emergency decontamination. The Decontamination Kit No. 2 employs sorbent technology and utilizes a 15 g squeeze bottle to dispense AMBERGARD XE-555 decontaminant. The kit is able to decontaminate all known liquid chemical agents.

Availability

Commercially available

Current User

Not specified

Manufacturer

Tradeways Ltd.
184 Duke of Gloucester Street
Annapolis, MD 21401
410-295-0813 (Tel)
410-295-0821 (Fax)

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

GB, V, HD

BW Agents Decontaminated

All

**High Hazard TIMs
Decontaminated**

Not specified

**Medium Hazard TIMs
Decontaminated**

Not specified

**Low Hazard TIMs
Decontaminated**

Not specified

Decontaminant Solutions

Water

Capacity/Throughput

Decontaminates 738 ft²

WORKING DRAFT

Set-up Time

Not specified

Physical Parameters

Size

3.72 L x 2.2 W x 0.1 H (in)

Weight

0.7 oz

Power Requirements

None

Logistical Parameters

Consumables Required

Decontaminant

Maintenance Repairs Required

None

Shelf Life

Not specified

Transportability

Man-Portable Decontamination Unit

Durability

Not specified

Environmental Conditions

-59.8 °F to 159.8 °F (storage temperature)

Environmental Considerations

Not specified

Resources

One person

Unit Cost

Not specified

Maintenance Cost

Not specified

Warranty

Not specified

Special Requirements

Operator Skills Required

Minimal

Operator Training Required

Minimal

Training Available

Not specified

Manuals Available

Not specified

Support Equipment

None

Testing Information

Information not available

Applicable Regulations

Not specified

WORKING DRAFT

General

Equipment Name

Decontamination Kit, Individual Equipment: M295

ID# 69



Decontamination Process

Physical (removes contaminant) and Chemical (neutralizes contaminant)

Applications

Personnel

Equipment

Infrastructure

Yes

No

No

Application Notes

The M295 Individual Equipment Decontamination Kit is used to decontaminate personnel equipment. The M295 Kit employs sorbent technology and utilizes AMBERGARD XE-555 (decontaminant) in four wipedown mitts that are made of non-woven polyester material with a polyethylene film backing.

Availability

Commercially available

Current User

In service with the U.S. Armed Forces

Manufacturer

Truetech
680 Elton Avenue
Riverhead, NY 11901
516-727-8600 (Tel)

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

Not specified

BW Agents Decontaminated

Not specified

**High Hazard TIMs
Decontaminated**

Not specified

**Medium Hazard TIMs
Decontaminated**

Not specified

**Low Hazard TIMs
Decontaminated**

Not specified

Decontaminant Solutions

Not specified

Capacity/Throughput

Not specified

Set-up Time

Not specified

WORKING DRAFT

Physical Parameters

Size	9 L x 5.4 W x 1.9 H (in)
Weight	8 oz
Power Requirements	None

Logistical Parameters

Consumables Required	Decontaminant
Maintenance Repairs Required	None
Shelf Life	Not specified
Transportability	Mobile Decontamination Unit
Durability	Not specified
Environmental Conditions	Not specified
Environmental Considerations	Not specified
Resources	One person
Unit Cost	Not specified
Maintenance Cost	Not specified
Warranty	Not specified

Special Requirements

Operator Skills Required	Minimal
Operator Training Required	Minimal
Training Available	Not specified
Manuals Available	Not specified
Support Equipment	Not specified
Testing Information	Information not available
Applicable Regulations	Not specified

WORKING DRAFT

General

Equipment Name

ID# 70

TVI Quick-E WMD Decon Shower Shelter



Decontamination Process

Physical (removes contaminant)

Applications

Personnel

Equipment

Infrastructure

Yes

No

No

Application Notes

Not specified

Availability

Commercially available

Current User

Not specified

Manufacturer

TVI Corporation
7100 Holladay Tyler Road
Suite 300
Glenn Dale, MD 20769
301-352-8800 (Tel)
301-352-8818 (Fax)

Source

TVI Corporation

Operational Parameters

CW Agents Decontaminated

Not specified

BW Agents Decontaminated

Not specified

High Hazard TIMs

Not specified

Decontaminated

Medium Hazard TIMs

Not specified

Decontaminated

Low Hazard TIMs

Not specified

Decontaminated

Decontaminant Solutions

Water

Capacity/Throughput

Not specified

Set-up Time

1 min

Physical Parameters

Size

Varies

WORKING DRAFT

Weight Not specified

Power Requirements Not specified

Logistical Parameters

Consumables Required Decontaminant

Maintenance Repairs Required Not specified

Shelf Life 10 yr

Transportability Shelters are easily transported.

Durability Shelters are extremely rugged; corrosion resistant

Environmental Conditions Shelters withstand extreme temperatures, strong winds, and heavy snow loads.

Environmental Considerations Shelters have replaceable liners, ground cloth, and fitted floor basin to control wastewater.

Resources 2 person crew required

Unit Cost Not specified

Maintenance Cost Not specified

Warranty Not specified

Special Requirements

Operator Skills Required Not specified

Operator Training Required Not specified

Training Available Not specified

Manuals Available Not specified

Support Equipment Not specified

Testing Information Not specified

Applicable Regulations Not specified

WORKING DRAFT

General

Equipment Name

ID# 71

TVI Quik-Kleen Mass Decontamination System



Decontamination Process

Physical (removes contaminant) and/or Chemical (neutralizes contaminant)

Applications

Personnel

Equipment

Infrastructure

Yes

No

No

Application Notes

This system is designed to provide immediate decontamination capability at remote sites by a staff of four. The rugged shelter assures reliable and protected space for decontamination in cold or adverse weather.

Availability

Commercially available

Current User

Not specified

Manufacturer

TVI Corporation
7100 Holladay Tyler Road
Suite 300
Glenn Dale, MD 20769
301-352-8800 (Tel)
301-352-8818 (Fax)

Source

TVI Corporation

Operational Parameters

CW Agents Decontaminated

Not specified

BW Agents Decontaminated

Not specified

High Hazard TIMs

Not specified

Decontaminated

Medium Hazard TIMs

Not specified

Decontaminated

Low Hazard TIMs

Not specified

Decontaminated

Decontaminant Solutions

Not specified

Capacity/Throughput

Not specified

Set-up Time

Not specified

WORKING DRAFT

Physical Parameters

Size	Not specified
Weight	Not specified
Power Requirements	Not specified

Logistical Parameters

Consumables Required	Decontaminant
Maintenance Repairs Required	Not specified
Shelf Life	10 yr
Transportability	Shelters are easily transported.
Durability	Shelters are extremely rugged and corrosion resistant.
Environmental Conditions	Shelters withstand extreme temperatures, strong winds, and heavy snow loads.
Environmental Considerations	Not specified
Resources	Not specified
Unit Cost	Not specified
Maintenance Cost	Not specified
Warranty	Not specified

Special Requirements

Operator Skills Required	Not specified
Operator Training Required	Not specified
Training Available	Not specified
Manuals Available	Not specified
Support Equipment	HEPA filtration units
Testing Information	Not specified
Applicable Regulations	Not specified

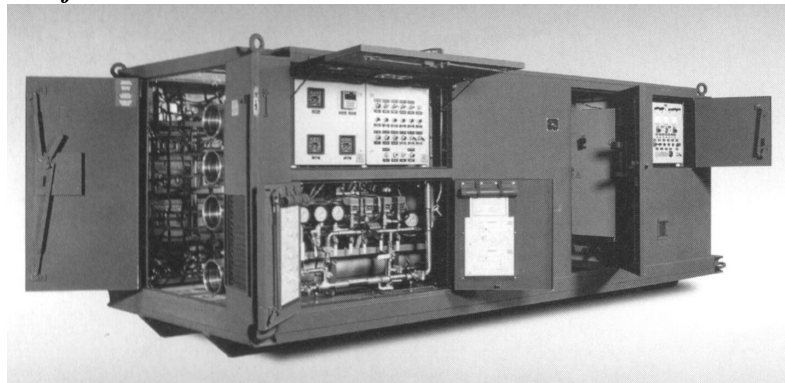
WORKING DRAFT

General

Equipment Name

Zenon Advanced Double Pass Reverse Osmosis Water Purification Unit

ID# 72



Decontamination Process

Physical (removes contaminant)

Applications

Personnel

No

Equipment

No

Infrastructure

Yes

Application Notes

The Zenon Advanced Double Pass Reverse Osmosis Water Purification Unit (ADROWPU) is designed to purify water that has been contaminated with NBC agents. The ADROWPU utilizes a double pass reverse osmosis process in order to remove contamination. The process employs pressure to separate dissolved solutes and suspended substances from water.

Availability

Commercially available

Current User

In service in Canadian and Taiwanese Armed Forces

Manufacturer

Zenon Environmental Systems, Inc.
845 Harrington Court
Burlington, Canada L7N 3P3
905-639-6320 (Tel)
905-639-1812 (Fax)

Source

Wide Area Decon: CB Decontamination Technologies, Equipment, and Projects, 22 March 1999 (U.S. Joint Service Material Group)

Operational Parameters

CW Agents Decontaminated

Not specified

BW Agents Decontaminated

Not specified

High Hazard TIMs

Not specified

Decontaminated

Medium Hazard TIMs

Not specified

Decontaminated

Low Hazard TIMs

Not specified

Decontaminated

Decontaminant Solutions

Not specified

Capacity/Throughput

Purifies 84700 L/d of fresh water, 58950 L/d of brackish water, and 52390 L/d of seawater

Set-up Time

Not specified

WORKING DRAFT

Physical Parameters

Size	18.0 L x 6.89 W x 5.57 H (ft)
Weight	140800 lb
Power Requirements	40 kW diesel generator

Logistical Parameters

Consumables Required	Not specified
Maintenance Repairs Required	Not specified
Shelf Life	Not specified
Transportability	Not specified
Durability	Not specified
Environmental Conditions	-40 °F to 104 °F (operating temperature)
Environmental Considerations	Not specified
Resources	Not specified
Unit Cost	Not specified
Maintenance Cost	Not specified
Warranty	Not specified

Special Requirements

Operator Skills Required	Not specified
Operator Training Required	Not specified
Training Available	Not specified
Manuals Available	Not specified
Support Equipment	Not specified
Testing Information	Information not available
Applicable Regulations	Not specified